

WE CLAIM:

1. A system for configuring a telephone for service comprising:
  - a data network to provide data connectivity for a plurality of data communications channels using data transport protocols;
  - 5 at least one data network telephone connected to the data network, the data network telephone operable to communicate voice signals as data packets on a voice over data channel, the voice over data channel being one of the plurality of data communications channels on the data network containing packetized voice signals, the data network telephone being operable to convert data packets communicated on the voice over data channel to voice;
  - 10 a telephone configuration server connected to the data network, the telephone configuration server comprising at least one service provider configuration comprising at least one voice communications function; and
  - 15 a telephone part number comprising any combination of alphanumeric characters, the telephone configuration server being operable to associate the telephone part number with a selected one of the at least one service provider configurations.
2. The system of Claim 1 wherein the service provider configuration includes a service provider proxy address associated with a service provider server operable to configure the data network telephone in accordance with a telephone service provider.
3. The system of Claim 2 wherein the service provider server includes a network telephony connection server operable to perform registration functions, the registration functions being operable to enable the data network telephone to communicate on the data network.
4. The system of Claim 3 wherein the network telephony connection server uses a call management protocol to perform registration functions.

5. The system of Claim 4 wherein the call management protocol is a protocol selected from the group consisting of: Session Initiation Protocol (SIP), H.323, MGCP and MEGACO.

1 6. The system of Claim 1 further comprising a telephone service mapping system operable  
2 to associate the telephone part number with the service provider configuration.

7. A telephone for communicating voice signals on a data network telephony system, the telephone comprising:

a network interface to sense a network connection;

a signaling stack operable to perform call initiation functions;

5 a media engine operable to perform data communications functions, the media engine comprising a voice function operable to communicate digitized voice signals on data packets;

10 a telephone configuration identifier operable to establish a connection to a telephone configuration server comprising at least one service provider configuration; and

15 a telephone part number comprising any combination of alphanumeric characters associated with a selected one of the at least one service provider configurations in the telephone configuration server, the data network telephone being operable to receive the service provider configuration during the connection with the telephone configuration server.

8. The telephone of Claim 7 further comprising:

a service initialization function operable to establish a connection to the telephone configuration server and to receive configuration information from the telephone configuration server.

1 9. The telephone of Claim 8 wherein the telephone receives a service provider proxy address  
2 from the telephone configuration server, the service provider proxy address associated with a  
3 service provider server, the telephone further comprising a register function to connect to the  
4 service provider server to obtain a telephone configuration.

1 10. The telephone of Claim 9 wherein:

2 the telephone includes a display device; wherein, the telephone configuration  
3 includes a service provider logo and the registration function displays the service provider  
4 logo on the display.

1 11. A telephone configuration server comprising:

2 a phone configuration database comprising a plurality of data network telephone  
3 part numbers; and

4 at least one service provider configuration comprising a service provider  
5 configuration comprising features in accordance with a telephone service provider, the  
6 telephone configuration server operable to communicate the service provider  
7 configuration to a data network telephone associated with a corresponding one of the  
8 plurality of telephone part numbers.

1 12. The telephone configuration server of Claim 11 wherein the service provider  
2 configuration includes a service provider proxy address associated with a service provider server,  
3 the telephone configuration server operable to communicate the service provider proxy address  
4 to the data network telephone.

1 13. The telephone configuration server of Claim 11 further comprising a mapping function  
2 operable to receive at least one telephone part number associated with at least one service  
3 provider configuration.

14. A method of configuring a data network telephone to perform telephone service function in accordance with a telephone service provider, the method comprising the steps of:

5 connecting to a telephone configuration server;

sending a telephone part number associated with the data network telephone to the telephone configuration server;

receiving the service provider configuration corresponding to the telephone part number; and

10 configuring the data network telephone in accordance with the service provider configuration.

1 15. The method of Claim 14 wherein the step of receiving the service provider configuration  
2 includes the step of receiving a service provider proxy address.

1 16. The method of Claim 15 wherein the step of configuring the data network telephone  
2 includes the step of connecting to a service provider server associated with the service provider  
3 proxy address.

1 17. The method of Claim 14 further comprising the step of mapping the service provider  
2 configuration to the telephone part number, the step of mapping comprising the steps of:

3 sending the telephone part number associated with the data network telephone to  
4 the telephone configuration server; and

5 sending the service provider configuration corresponding to the telephone part  
6 number to the telephone configuration server.

1 18. The method of Claim 17 wherein the step of mapping is performed in a method for  
2 manufacturing the data network telephone.

1       19.    A method of providing service provider selected configurations of a data network  
2   telephone from a central server, the method comprising the steps of:  
3                receiving a telephone part number corresponding to the data network telephone;  
4                retrieving a service provider configuration corresponding to the telephone part  
5   number from a telephone configuration database; and  
6                sending the service provider configuration to the data network telephone.

1       20.    The method of Claim 19 further comprising, before the step of receiving the telephone  
2   part number, the step of mapping at least one telephone part number to a corresponding service  
3   provider configuration.

21.    The method of Claim 20 wherein the step of mapping the telephone part number  
comprises the steps of:

              connecting to a data network telephone;  
              receiving a selected telephone part number corresponding to the data  
5   network telephone;  
              receiving a selected service provider configuration corresponding to the  
telephone part number; and  
              storing the selected telephone part number in correspondence with the  
service provider configuration.